

# SMM 21126 P

## High Contrast Gray Scale Monitor



- CRT with anti-reflective and antistatic panel and dispenser cathode for long CRT life
- Automatic calibration of black level without external sensor, 20 minutes after power on and every 12 hours
- Constant Gamma for equal gray scale performance in multi monitor configurations, also over complete lifetime of CRT
- High quality CRT, 75 fL ( $250 \text{ cd/m}^2$ ), front-of-screen luminance through 32 % total transmission
- 1280 x 1600 addressability standard
- Scan range of 80 to 130 kHz horizontal and 50 to 120 Hz vertical
- Microprocessor control of all internal monitor functions
- Front panel luminance, contrast and geometry controls are standard and can be disabled for calibrated diagnostic applications
- Front panel control for image rotation
- Ambient light sensor for automatic contrast control

# display SOLUTIONS

The Siemens SMM-Series of gray scale monitors is designed to meet the demanding requirements of Medical Imaging, Clinical Review Stations, Archival Image Viewing and Photogrammetry applications.

The SMM 21126 P features pixel resolutions up to 1280 x 1600 with high luminance and low background levels for wide dynamic range. The internal microprocessor controls all electrical and magnetic monitor functions. The monitor is capable of storing multiple timing formats internally, including a full set of screen settings for each format.

Additionally, the dynamic focus circuitry ensures optimal sharpness at any point on the screen for every timing format. Formats are selected and modified through the RS 232 serial port.

The internal CRT cut-off control circuitry guarantees identical settings for each level of gray on all monitors in a multi monitor configuration over the lifetime of the CRT. This cut-off control, in combination with a longlife CRT dramatically extends the operating time of the monitor without the need for further adjustment.

# SIEMENS

# SMM 21126 P

## High Contrast Gray Scale Monitor

Technical Data	
<b>Power requirements</b>	
Input voltage	90 to 264 V, Wide range power supply
Power frequency	47 to 63.6 Hz
Power consumption	Approx. 100 W
Power factor control	According to EN 61 000
Power saving	According to VESA DPMS
<b>CRT specifications</b>	
Size	54 cm / 21", flat & square (portrait)
Deflection angle	90°
Light transmission	32 %
Phosphor type	P45, cadmium free
Surface	Multicoated conductive panel (AR/AS)
Gun system	Dispenser cathode (long life)
Focus	Static and dynamic
<b>General performance</b>	
Horizontal frequency	80 to 130 kHz
Vertical frequency	50 to 120 Hz
Formats	19 max., self recognizing and auto-scaling
<b>Display performance</b>	
Display area (W x H) in mm	300 x 400
Non-linearity	< 2 %
Raster stability	0.05 mm max. swim & jitter
Maximum luminance	P45: $\geq 75$ fL @ 0.7 V <sub>pp</sub> input signal (at 32 % total transmission)
High voltage regulation	0.2 % max. size change
<b>Video amplifier, inputs</b>	
Type	High contrast, high resolution supports 250 MHz pixel- clock
Connectors	BNC type
Impedance	75 $\Omega$ or 50 $\Omega$
Video level	0.75 to 1.2 V <sub>pp</sub>
Sync level	0.1 to 0.6 V <sub>pp</sub>

<b>Front panel controls</b>	
Controls	Power on/off, contrast, luminance
Geometry	H/V-phase, H/V-amplitude, image rotation
Ambient light sensor	For automatic contrast control
<b>Operation conditions</b>	
Temperature	
- Operating	10 °C to 35 °C, up to 40 °C with some restrictions
- Storage	-25 °C to +70 °C
Humidity, rel.	
- Operating	20 % to 80 %
- Storage	20 % to 80 %
<b>Mechanical specifications</b>	
Dimensions (W x H x D) in mm	403 x 580 x 520
Weight	Approx. 33 kg
<b>Approvals</b>	
Safety	EN 60 950, UL 1950, cUL, DHHS
EMC	
- Emission	FCC Class A, MPR II, EN 60 601-1-2 Class B
Others	CE Mark Medical Device Class I EN ISO 9001, EN 46 001 certified plant
<b>Options</b>	
- OEM versions	
- Other phosphors available	
Miscellaneous	Customer specific labeling available
<b>Ordering data</b>	
SMM 21126 P	<b>Order No.</b> 6GF6300-2CA01